

ABSTRACT OF THE DISCLOSURE

Provided are a multiplexing circuit for
multiplexing a memory output signal output by a memory
for temporarily accumulating a low-order group signal
5 with an overhead bit necessary for optical digital
transmission and a pattern generation circuit for
generating an unfixed pattern having no fixed value. An
unfixed pattern is applied to the multiplexing circuit
while the memory outputs a fixed pattern. A selection
10 circuit provided between the multiplexing circuit and
the memory selects an unfixed pattern between a fixed
pattern output by the memory and an unfixed pattern
output by the pattern generation circuit.